

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/B2004/003532

International filing date (day/month/year)
26.10.2004

Priority date (day/month/year)
27.10.2003

International Patent Classification (IPC) or both national classification and IPC
C09B67/26, C09B69/04, C09D11/00, D21H21/28

Applicant
CLARIANT INTERNATIONAL LTD

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/003532

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/B2004/003532

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	1-9
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

V. Reference is made to the following documents:

D1: EP -A- 0 479 726

D2: EP -A- 0 212 345

D3: DE -A- 2 061 760

D4: EP -A- 0 033 719

V.1. The current application seems to fulfill the requirements concerning novelty, inventive step and industrial applicability as set out in Article 33(1) PCT.

The current application deals with concentrated solutions of anionic dis- resp. tetrazo dyestuffs (formula (I) of claim 1), comprising as an additive specific mono- resp. diamino polyglycoles (formulas (II) and (III) of claim 1). These solutions solve the problem of storage stability.

D1 is considered being the closest prior art. It also deals with concentrated aqueous solutions of anionic disazo dyes using specific polyglycole amines to improve the storage stability, thereby solving the same technical problem.

The difference between the polyglycole amines of claim 1 and D1 are the tertiary amino endgroups, which are substituted by alkyl- and/or polyalkylene oxid (see D1; page 2, lines 15-37) and not primary ones like in the current application.

Claim 1 is therefore novel over D1.

D2 deals with concentrated aqueous solutions of anionic trisazo dyes using specific polyalkylene amines (see formula (VIII) on page 7 of D2), which could comprise also primary mono amines as endgroups. The terminal oxygen atoms of the D2' polyglycole amines are not methylised as those of the current application. Furthermore, D2 deals with trisazo dyes.

D2 lacks the methylisation of the terminal oxygen atoms and dis- resp. terazo dyes.

Claim 1 is therefore novel over D2.

Regarding the possibility of combining D1/D2, a skilled person would surely take the polyglycole amines of D2 as additives in the solutions of D1 to improve the storage stability; those polyglycole amine he would not modify by terminal methylisation. To do this, inventive efforts would be necessary.

Also D3 (structurally slightly different disazo dyes [C.I. 28160]; no primary amino groups; no terminal methylisation in the polyglycole amine; see D3, example 4) and D4 (same disazo dyes, alkanol amines beneath polyglycole ethers as additives) give no hints to fill the gap between claim 1 and D1/D2.

**WRITTEN OPINION OF THE
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AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2004/003532

The independent claims 1,6-8 (as well as the dependent claims) are novel and inventive over the disclosed prior art.

VII. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1/D2 is not mentioned in the description, nor are these documents identified therein.

VIII. Claim 9 should be written as dependent from claim 8.